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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,441	11/07/2003	Gaelle Brun	05725.1257-00	9409

22852 7590 08/09/2007
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

CHANNAVAJJALA, LAKSHMI SARADA

ART UNIT	PAPER NUMBER
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1615

MAIL DATE	DELIVERY MODE
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08/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/702,441	Applicant(s) BRUN ET AL.	
	Examiner Lakshmi S. Channavajjala	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6-13-07; 11-7-03</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Receipt of IDS dated 6-13-07 and 11-7-03 and response to election requirement dated 5-25-07 is acknowledged.

Claims 1-34 are pending in the instant application.

Election/Restrictions

Applicants' arguments with respect to the election of a species from the claimed cyclic carbonates, methods of treatment, and election of an additional component such as a fixative polymer, dye, oxidizing agents) are persuasive and therefore the election requirement of the last office action has been withdrawn.

Accordingly, all of the instant claims are examined for the above species and the rejection is as follow:

Claim Rejections - 35 USC § 112

1. Claims 1-3, 5-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Instant claim 1 recites "at least one cyclic carbonate capable of polymerizing under external stimulus", which is vague and indefinite. While claim 2 further defines the external stimulus, the definition includes any and all possible stimuli from an external source i.e., lightening, sun light, snow, a chemical interaction, car exhaust, smoke of any kind and thus, the meets and bounds of the "external stimulus" are not clear. It is unclear as to which cyclic carbonates (that are polymerizable) fall within the scope of the claimed invention. A clarification is requested.

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2. Claims 1-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Instant claims require a cyclic carbonate as an essential component, which according to the claims should be capable of in situ polymerization. Applicants state that the prior art cyclic carbonates (references described in paragraph [011]) are not capable of polymerizing in situ. Applicants further state in paragraph [027] that the compounds of formula (1) may for example be those described in the documents described on page 7. However, applicants have not provided any description, structural formula nor provided the documents of page 7 so as to convey how the claimed cyclic carbonates of the instant invention are different from those described in [011]. Further, the cyclic carbonates described in claim 13, criteria V, includes compounds that are described in the references, which according to applicants do not or are not capable of polymerizing with an external stimulus. Thus, the objective to put the public in possession of what the applicant claims as the invention, has not been met because the specification fails to provide description of the claimed compounds by "whatever characteristics sufficiently distinguish it".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-11, 14-17, 18-23, 31-34 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,049,007 to Russell et al (Russell).

Russell teaches hair-waving compounds comprising of film-forming resins containing pendant hydroxyl, amine, and/or thiol groups, a cyclic nitrile carbonate and a flexible adhesion promoter in a non-aqueous solvent.

Instant claim 1 requires a cyclic carbonate that is capable of polymerizing by external stimulus. Instant specification describes art known cyclic carbonates that are not capable of polymerizing. However, a review of the cited prior art does not include the nitrile carbonates taught by Russell and hence meets the claimed limitation. Further, the burden is shifted to applicants to show that the nitrile carbonates are not capable of polymerizing by external stimulus.

The cyclic nitrile carbonate has the structure as given in col. 3, line 24-50, wherein the structure of the cyclic carbonate meets the description of the variables X, Z, R1, R2 etc., as mentioned in claim 10. According to claim 10, Z can be linear alkylene radical optionally interrupted with a heteroatom and thus includes the cyclic nitrile of

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Examples I-VII describe the preparations containing nitrile carbonates and describe the amounts of carbonate that fall within the claimed broad percentages (claims 19-20). The attachment of R group on the C of nitrile carbonate reads on the branched radical of claim 11. The film-forming polymer described by Russell meets the fixative polymers of instant claims 14-15 and 21. For claims 8-9, the cyclic carbonate of Russell meets the claim requirements and hence the property of providing resistance to shampooing is inherent. Hence Russell anticipates instant claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-23 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,405,646 to Boden et al (Boden).

Boden teaches 6-membered cyclic carbonate that falls within the genus of cyclic carbonates of instant claim 10 (see abstract, col. 5, L 5-10). Boden teaches the compounds for enhancing the aroma of perfumes and suggests several applications such as hair spray, perfumes, colognes and other cosmetic compositions (see example X for hair spray composition), which read on instant hair care. Instant claim 1 does not state what the hair is being treated for and hence the hair spray composition for enhancing the perfume taught by Boden meets the claimed method. Boden teaches additional components such as thickeners, surfactants, antioxidants etc., (col. 8-9, example X) to be incorporated in to the composition, all of which meet the limitations of claims 14-15 and 21-22. For the amounts of carbonates and the other ingredients, the amounts recited in the examples of Boden fall within the claimed category. While Boden teaches the claimed compounds for enhanced aroma of perfumes, the reference fails to teach any specific example or a formulation. However, examples X and XI suggests incorporating any of the aroma enhancing substances of table I, which includes cyclic carbonates. Further, Boden clearly states that that the claimed carbonates are useful in augmenting the aroma of perfumes used in cosmetic compositions such as hair sprays and shampoos. Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to

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employ the cyclic carbonates of Boden in hair compositions for increasing the aroma of the perfumes employed. Instant claims do not require that the cyclic carbonates increase the hair volume, fullness etc and may be achieved by any of the conditioner or shampoo composition components in which the cyclic carbonates are employed and Boden teaches such shampoo and conditioners agents to be employed together with cyclic carbonates. While Boden does not state the polymerization limitation claimed, the cyclic carbonates of Boden being the same, the burden is on the applicants to show that the carbonates of Boden are not capable of polymerizing.

Claims 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 4,049,007 to Russell et al (Russell) as applied to claim 1-11, 14-17, 18-23, 31-34 above, and further in view of US 4,797,130 to Clausen et al (Clausen).

Russell teaches the claimed cyclic carbonate compounds in hair waving compositions and their advantages in hair curling after the hair is treated with oxidizing and reducing agents (col. 2). However, Russell fails to teach the claimed oxidizing, reducing agents, couplers and dyes in the composition.

Clausen teaches oxidative hair dyeing compositions comprising a novel coupler, oxidizing hair dyes, and other components such as oxidizing agents (hydrogen peroxide), ascorbic acid and sodium sulfite etc (col. 1, col. 2, col. 3, L 40-67, example 5-8), all of which read on the claimed components. Clausen further teaches that the hair dye compositions may be employed not just for color fastness but also in permanent

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waving compositions (col. 1 and col. 9). Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to combine employ the oxidative hair dye, developer, oxidizing and reducing agents of Clausen to the composition of Russell containing cyclic carbonates because Clausen suggests a combination of hair dyeing and hair waving. A skilled artisan would have understood that the processes may be performed separately or together and when combined would have expected to achieve hair dyeing that is stable and also permanent waving.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 7.00 AM -4.00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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August 3, 2007


LAKSHMI S. CHANNAVAJJALA
PRIMARY EXAMINER